

CLAIMS

1. Disposable cup to be set up on a spray gun in particular a gravity gun (17) for preparing, applying and preserving a paint, said cup having a cylindrical shape or a truncated cone-shaped body (1) including a bottom (3) with a face crossed by a vent opening (6) and a cover (4) whose outlet duct (11) of the paint is directly set up on the spray gun or through an adaptation part (18) this latter being set up on the spray gun (17), characterized in that it includes on the bottom wall (3) of the cup a closable vent device (7) with a moving part manually adjusted and having a protruding end conformation for shutting in the closed position the vent opening (6) and extracting from it in the opened position in order to free this conformation from the vent opening (6), this allows when the closable vent device (7) is opened, to let the air enter to occupy the inner volume space created by the used paint at the time of painting and when it is closed, to close at least in a liquid-tight way, the vent opening (6) in order to form a container for paint preparation.

2. Disposable cup according to claim 1 characterized in that the closable vent device (7) is a vent valve set up or conformed in or on the wall of the bottom (3) at the site of the vent opening (6) under the level base of the cup in filling position.

3. Disposable cup according to the previous claim characterized in that the vent valve is made up of a movable element (20) in a tubular valve body forming a valve duct (22) for in the closed position tightly closing the vent opening (6) existing in the wall (3) of the bottom of the cup.

4. Disposable cup according to the previous claim characterized in that the movable element (20) has an end conformation in protrusion, adapted for

engaging in the closed position to effect the tightness by penetrating into the vent opening (6).

5 5. Disposable cup according to claims 3 and 4 characterized in that the tubular body making up the valve duct (22) extends from the bottom (3) of the cup outward around the vent opening (6) and has on its inner side face at least one immobilization structure provided for cooperation with two complementary forms recessed or in protrusion existing in or on the body of the movable element (20) or vice versa.

10 6. Disposable cup according to the previous claim characterized in that the tubular body making up the valve duct (22) extends from the bottom (3) of the cup outward around the air vent opening (6) and has on its inner side face an inner annular rib (24) of vent provided for carrying out two successive snap-in protrusion abutments with two recessed complementary forms existing in the body of the movable element (20).

20 7. Disposable cup according to the previous claim characterized in that the movable element is a full or hollow valve plug (25) having a general cylindrical shape, with an upper peripheral edge (26) forming a shoulder, and frontal surface of lower end with a central protrusion and the side surface having immobilization structures for holding in the two positions and at least one passage of air.

25 8. Disposable cup according to the previous claim characterized in that the movable element is a full or hollow valve plug (25) having a general cylindrical shape, with an upper peripheral edge (26) forming a shoulder, the frontal surface of lower end with a central protrusion and the side surface having two set back annular elements and at least one air passage.

35 9. Disposable cup according to any of the

previous claims characterized in that the technical shapes of the vent device or those of its movable part keep the same general function.

5 10. Disposable cup according to claim 7 or 8 characterized in that the central protrusion of the frontal surface of the lower end is a closing pin (28) having a lightly truncated cone shape for the tight closing, at least tight-liquid closing, of the vent opening (6), the plug (25) being held in this position
10 by at least one immobilization structure.

11. Disposable cup according to the previous claim characterized in that the size of the closing pin (28) and the tight penetration of this latter in the vent opening (6) are such that it does not
15 protrude out of the inner face of the bottom face of the cup or at the very most that this just above the latter or is flush with this one.

12. Disposable cup according to claim 1 and 11 characterized in that the basis wall (3) of the cup is set back from the corresponding face of the cup by
20 means of an annular peripheral edge (5) which height is such that the closable vent device (7) is in recessed position from the plane defined by the upper outer edge of the edge (5) making up the support edge
25 of the cup in standing position, giving in this position a good stability.

13. Disposable cup according to claim 8 characterized in that both recessed forms in the side surface of the plug (25) are two annular grooves (29) and (30), successively from the bottom to the top of
30 the plug (25) in one of which the snap-in inner annular abutment rib (24) of the valve duct (22) houses each time, thus effecting each time a stop, respectively an opening stop or vent stop and a
35 closing stop.

14. Disposable cup according to claim 8

characterized in that the passage of air is at least one or two notches (31) and (32) running lengthways diametrically opposed, set back from the side surface of the body of the valve plug (25), deeper than the
5 first groove and which extend from the frontal lower end (27), across the first groove (29) and end before the second groove (30).

15. Disposable cup according to claim 1 and
8 characterized in that the valve plug (25) or a
10 second identical valve plug (33) can be set up on the outlet duct of the cover in order to form a paint pot for the preservation of the leftover paint.

16. Disposable cup according to claim 1
characterized in that the closable vent device is made
15 up of a cap plug which covers and is slidably mounted on the cylindrical protrusion of the cup bottom face.

17. Disposable cup according to claim 1
characterized in that the plug of the closable vent
device is crossed by a duct of air passage.

20 18. Disposable cup according to the previous claim characterized in that duct of the air passage is divided into two channels in the lower end of the plug.

25 19. Disposable cup according to claim 16 characterized in that the cylindrical protrusion of the bottom face of the cup receiving the plug is crossed at its base by at least one channel of air passage.

30 20. Disposable cup according to claim 1 characterized in that the closable vent device is made up of a pivoting piece (45) crossed by an air passage channel moving between a closing tilted position in which the cup bottom opening (6) is closed by a
35 protrusion (51) of the body and in which said air passage channel is not aligned with the cup bottom opening (6) and an open position in which the inward

end side of the air passage channel faces or is close to the opening (6) of the bottom wall (3) of the cup.

21. Disposable cup according to any of the previous claims characterized in that the material of
5 the body of the cup is opaque, translucent or ultraviolet filtering.